

SPECIFICATIONS

5um LASER SYSTEM AND 14um LASER SYSTEM SHALL MEET THE FOLLOWING SPECIFICATIONS:

Qty: One (1) EA

5um Laser System, CW, multi mode, output frequency between 1960 cm⁻¹ and 2020 cm⁻¹ (between 5.1 um and 4.95 um), thermoelectrically cooled, with

Power > 10 mW when operated at or above 0°C and

Power > 20 mW when operated at or below -30°C,

including, and tested with, the following components:

- a. Housing with window with transmission adequate to transmit laser beam to meet power requirements above
- b. TE Cooler with thermo-sensor and controller, capable of cooling laser to -30°C (-22°F)
- c. Laser voltage monitor
- d. CW laser starter kit with laser diode driver and connectors
- e. Low noise, high stability laser current source, with voltage 0V to 15V.

Installation and test of TE cooled laser system in housing, with resulting test data

Qty: One(1) EA

14um Laser System, pulsed, output frequency between 680 cm⁻¹ and 720 cm⁻¹ (between 14.7 um and 13.9 um), thermoelectrically cooled, with

Power > 20 mW peak when operated at or above 0°C at 2% duty cycle, and

Power > 30 mW peak when operated at or below -30°C at 2% duty cycle,

including, and tested with, the following components:

- a. Housing with window with transmission adequate to transmit laser beam to meet power requirements above
- b. TE Cooler with thermo-sensor and controller, capable of cooling laser to -30°C (-22°F)
- c. Laser voltage monitor
- d. Pulsed laser starter kit with laser diode driver and connectors
- e. Two channel variable power supply, 0 to 32V, & 0 to 5A

Installation and test of TE cooled laser system in housing, with resulting test data